



# **Ahsanullah University of Science & Technology**

## **Department of Computer Science & Engineering**

### **Project Report on**

### **Digital Inventory Tool**

**Course Title: Database Lab**

**Course No: CSE 3104**

#### **Prepared By-**

#### **Group Members-**

1. Name: Fahim Hossain Ani

ID : 18.02.04.124

2. Name: Md. Munim Hasan Shafa

ID : 18.02.04.125

#### **Submitted to-**

**Mr. Nazmus Sakib**

Assistant Professor

AUST

**Mr. Munshi Rejwan Ala Muid**

Lecturer

AUST

## **Abstract**

Digital Inventory Tool is an inventory management system. Here in this project we have tried to build the whole system for a shop. Only the admins and employees assigned to access the tool can login and places the orders for customers. They can also add or delete products as well as entry the customers information. The owner and admins can easily go through their customers details and product details. They can also manipulate it if they want. Only admins can assign new employees. This system is being built to bring efficiency to the store management and fasten the customer services.

In this project we have used JAVA (jdk-16.0.2) language along with an open-source Java-based framework, JavaFX. JavaFX is used to design our interface and UI. For managing data we have used a relational database management system (RDBMS). In this project we have used Microsoft SQL Server 2019.

## **Objective**

We will analyze the project scenario and find out all the possible entities, relationships, and attributes. Then we will make a ER Diagram alongside with Relational Schema. Cardinality relationships will be made sure and premises will be given hereby.

## **Project Scenario**

When a customer comes to the store after choosing his/her desired items he can place the order and by a matter of time he / she can leave the store .The employees are assigned to access the tool can place their orders , they also have to entry their ids' then they can place the order. After that the quantity amount of the products of the store will be updated automatically and also the new products or any kind of update can be made in the system . Only authorized employees can do it .

## **Analysing Project Scenario**

Possible Entity	Possible Relationship	Possible Attributes
1.Customers 2.Products 3.Employees 4.Orders 5.Admins	Customer <b>places</b> an order	<u><b>1.Customers</b></u> ID Name Email Address Phone Number
	Products are <b>Sold</b> to orders	<u><b>2.Products</b></u> Product Id Name Price Description Product Type Quantity Number of orders
	Employees <b>Served</b> the order	<u><b>3.Employees</b></u> Employee Id Name Email Address Phone Number Joining Date Leaving Date
	Admins <b>can be</b> Employees	<u><b>4.Orders</b></u> Order Id Customer Id Date of Order Payment method Employee id Quantity Paid Amount Product id
		<u><b>5.Admins</b></u> Admin Id Username Password Employee id



## **Key Features**

1. Easy to understand & User friendly UI design
2. Admins and owner can easily manipulate data.
3. Customers information can be stored alongside with the amount of order they made.
4. By limiting accessing the tool we ensured the security of the system.